

Application Review

Issue Date:

Region: Asheville Regional Office
County: McDowell
NC Facility ID: 5600001
Inspector's Name: Christopher Scott
Date of Last Inspection: 05/16/2023
Compliance Code: 3 / Compliance - inspection

<p style="text-align: center;">Facility Data</p> <p>Applicant (Facility's Name): Coats American - Sevier Plant</p> <p>Facility Address: Coats American - Sevier Plant 630 American Thread Road Marion, NC 28752</p> <p>SIC: 2269 / Finishing Plants, Nec NAICS: 313312 / Textile and Fabric Finishing (except Broadwoven Fabric) Mills</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>	<p style="text-align: center;">Permit Applicability (this application only)</p> <p>SIP: NCAC 02D: .0503, .0516, .0521, .0524, .1100 NCAC 02Q: .0317, NSPS: Subpart Dc, Subpart VVV NESHAP: No PSD: No PSD Avoidance: No NC Toxics: No 112(r): No Other:</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Contact Data			Application Data
<p style="text-align: center;">Facility Contact</p> <p>John Moss Facilities Engineering Manager (336) 970-7438 630 American Thread Road Marion, NC 28752</p>	<p style="text-align: center;">Authorized Contact</p> <p>Sabrina Woodard Americas Manufacturing Director (828) 756-4111 630 American Thread Road Marion, NC 28752</p>	<p style="text-align: center;">Technical Contact</p> <p>Todd Wegenast Environmental Compliance Manager (850) 545-8142 630 American Thread Road Marion, NC 28752</p>	<p>Application Number: 5600001.23B Date Received: 07/17/2023 Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data Existing Permit Number: 01895/T28 Existing Permit Issue Date: 09/08/2023 Existing Permit Expiration Date: 01/31/2024</p>

Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2022	0.0300	3.81	188.40	3.19	0.0300	0.7821	0.3246 [Vinyl acetate]
2021	0.0300	4.11	181.27	3.46	0.0300	0.8585	0.3619 [Vinyl acetate]
2020	0.0300	4.65	162.57	3.91	0.0300	0.8774	0.3581 [Vinyl acetate]
2019	0.0300	4.44	240.75	3.73	0.0300	1.08	0.4744 [Vinyl acetate]
2018	0.0300	4.38	227.90	3.69	0.0300	1.21	0.5152 [Vinyl acetate]

<p>Review Engineer: Suraiya Akter</p> <p>Review Engineer's Signature: _____ Date: _____</p>	<p style="text-align: center;">Comments / Recommendations:</p> <p>Issue 01895/T29 Permit Issue Date: Permit Expiration Date:</p>
------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------

1. Purpose of Application

Coats American, Inc.-Sevier Plant currently holds Title V Permit No. 01895T27 with an expiration date of January 31, 2024, for operating textile dyeing and finishing facility located at 630 American Thread Road in Marion, McDowell County, North Carolina. This permit application is for a permit renewal without modification. The renewal application was received on July 17, 2023, or at least six months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied.

A minor modification permit (0189T27) was approved and issued on September 8, 2023. The minor modification was for the addition of one new natural gas-fired boiler (ES-18) and the removal of two boilers (ES-15 and ES-16) from the existing permit. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

2. Facility Description

This facility manufactures high strength thread including spinning, twisting, application of dyes and a polymer coating to the thread. The majority of emissions from the facility come from solvents used in the thread coating (bonding) operation (primarily ethanol). The Sevier bonders were the original bonders at the McDowell County facility. Most of the bonders were moved to the facility from other Coats American plants. All the Sevier Bonders are located in the same room along with a few other bonders.

The facility is a Title V Major facility because emissions of VOC exceed 100 tons per year.

3. History/Background/Application Chronology

History/Background

February 4, 2019	TV permit renewal issued. Air Permit No. 01895T27 was issued on February 4, 2019 with an expiration date of January 31, 2024.
March 28, 2019	A violation of notice was sent to Coats American due to failure of submission of the annual compliance certification on due time. Coats was asked to respond by April 11, 2019. An official response was received by DAQ on April 2, 2019 stating that the submission failure occurred due to administrative error even though the compliance certificate was reviewed and signed by EPA prior to the deadline.
August 30, 2019	An inspection was conducted by Chris Scott on August 29, 2019 and the facility was found to be in compliance with Air Permit No. 01895T27.
May 6, 2020	An inspection was conducted by Chris Scott on May 1, 2020 by phone to conduct a Partial Compliance Evaluation (PCE) due to COVID-19 and the facility was found to be in compliance with Air Permit No. 01895T27.
June 3, 2020	Air Pollutant Point Source Emissions Inventory for reporting year 2019 was submitted on June 2, 2020.
July 21, 2020	Monthly plant wide HAPs emission report was submitted on July 21, 2020.

February 17, 2021	An onsite inspection was conducted by Chris Scott on February 17, 2021 and the facility was found to be in compliance with the Air Permit No. 01895T27.
April 29, 2022	An onsite inspection was conducted by Chris Scott on April 21, 2022 and the facility was found to be in compliance with the Air Permit No. 01895T27.
January 24, 2023	Monthly plant wide HAPs emission report was submitted on July 21, 2020.
January 27, 2023	A reminder letter was sent to Coats to submit the annual compliance certification. Another letter to submit annual point source air pollutant emissions inventory for calendar year 2022 was sent to Coats.
February 8, 2023	Annual Compliance Certification was submitted by Coats.
June 6, 2023	Air Pollutant Point Source Emissions Inventory for reporting year 2022 for Coats was submitted.
July 18, 2023	Semi-annual Compliance Summary for the reporting period January-June 2023 was submitted. The monthly report for Hazardous Air Pollutants (HAPs) plant wide emissions was submitted.

Application Chronology

April 20, 2023	A reminder letter was sent to Coats about the expiration of TV 0185T27.
July 17, 2023	Received permit application 5600001.23B for TV renewal.
August 1, 2023	Sent acknowledgment letter indicating that the application for permit renewal was complete.
October 10, 2023	Coats was asked to provide more information for clarification on which equipment to be deleted from the existing permit (This conversation was actually started on September 12 but ended with corrected information on October 10, there were several episodes of communication, but only the last one is listed here to avoid any confusion).
October 11, 2023	Coats provided the facility's layout marked with the name of the sources as listed in Ibeam's emission sources along with a separate excel chart with the details.
October 12, 2023	Draft permit and permit review forwarded to Booker for review.
October 20, 2023	Received Booker's comments and the edited draft permit and permit review forwarded to the applicant, region and compliance section for review. Applicants sent back their review right away.
October 24, 2023	Samir sent back his review and comments

November 14, 2023 Chris Scott from Asheville Regional Office sent back his review and comments.

4. Permit Modifications/Changes and TVEE Discussion

The following table describes the modifications to the current permit as part of the renewal process.

Pages	Section	Description of Changes
--	Cover page and Throughout	<ul style="list-style-type: none"> Updated all dates and permit revision numbers. Added all the individual equipment's name for both source ES-03 and ES-08 as in listed in permit and specified by the facility
4	2	Removed emission source ES-07 and ES-12 from the table
--	2.1	<ul style="list-style-type: none"> Removed reference to the deleted source ES-07 and ES-12 throughout the section. Numbering of the source was updated throughout the section according to the updated source list
6	2.1 B	Changed the source name from "Thread Bonding Operation (ID No. ES-03)" to "Thread Bonding Operation (Seven Single Pass Bonders) (ID Nos. ES-03)"
n/a	2.1 C (former)	Removed this section because ES-12 has been removed from the permit
n/a	2.1 D (former)	Removed this section because ES-07 has been removed from the permit
9	2.1 C	Changed the source name from "Twelve thread bonding machines (ID No. ES-08)" to "Eight (ID Nos. ES-08)" as the number of bonders were changed according to the application.
10	2.1 C.2.c	Numbering of the bullet points were modified
15	2.2 B	Removed source ES-07 and ES-12 and corresponding references

This permit renewal is without a modification, however equipment **ES-03.8**, **ES-03.10**, **ES-07**, **ES-08.W9**, **ES-8.W10**, **ES-08.W11** and **ES-08.W18** will need to be removed from TVEE (end dated). Several pieces of equipment will have their descriptions revised in TVEE.

5. Regulatory Review

Coats American is subject to the following regulations. The permit was updated to reflect the most current stipulations for all applicable regulations, where necessary.

- 15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers—This regulation applies to particulate matter emissions from the combustion of fuel in indirect heat exchangers, such as boilers, that are discharged from any stack or chimney into the atmosphere. Fuel burning indirect heat exchangers (FBIHE) are limited to particulate matter emissions under this rule by the following equation:

$$E = 1.090 * Q^{(-0.2594)}$$

Where:

E = allowable emission limit for particulate matter in lb/million Btu

Q = maximum heat input in million Btu/hour.

The emission limitation for a given source is determined as a function of the total heat input to all such sources on site at the time the particular source was permitted. Also, once a limit has been established for a source, it shall not be changed upon the permitting of additional sources.

The current permit contains the following PM emission limits for the three existing FBIHE at section 2.1 A.1:

- Emissions of particulate matter from the combustion of propane and No. 2 fuel oil that are discharged from this source (ID No. ES-17) into the atmosphere shall not exceed 0.28 pounds per million Btu heat input.

After the modification according to TV permit no. 01895T28, there will be two FBIHE: The existing boiler (ID No. ES-17) with a heat input of 9.8 MMBtu/hr and the new boiler (ES-18) with a heat input of 16.74 MMBtu/hr, thus a total heat input of 26.54 MMBtu/hr. Using the equation in 02D .0503, the allowable PM emissions rate for the new boiler will be 0.47 lb/MMBtu.

$$E = 1.090 * Q^{(-0.2594)}$$

Where:

E = allowable emission limit for particulate matter in lb/million Btu

Q = maximum heat input in million Btu/hour.

$$E = 1.090 * Q^{(-0.2594)}$$

$$E = 1.090 \times (9.8 \text{ million Btu} + 16.7 \text{ million Btu})^{-0.2594}$$

$$E = 26.5^{(-0.2594)}$$

$$E = 0.47 \text{ lbs/million Btu heat input (rounded)}$$

Using AP-42 data (Section 1.4 “Natural Gas Combustion,” Tables 1.4-2), the estimated PM emissions are 7.6 lb/MMscf or when converted, 0.007 lb/MMBtu. Thus, the expected PM emissions are an order of magnitude lower than allowed by the rule. The DAQ policy and given the larger margin of compliance expected with this rule, no testing, monitoring, recordkeeping and reporting is required for PM emissions when firing natural gas. Compliance with this rule is expected.

- 15A NCAC 02D .0516, Sulfur dioxide – This regulation applies to any combustion source that emits sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by combustion of sulfur in fuels, wastes, ores, and substances shall be included when determining compliance with this standard.

SO₂ emissions from firing natural gas (which has inherently low sulfur) in this source are expected to be well below the allowable limit. Consistent with the current DAQ policy, no testing, monitoring, recordkeeping, and reporting is required to demonstrate compliance with this standard. Compliance with this rule is expected.

- 15A NCAC 02D .0521, Control of Visible Emissions – This regulation applies to fuel burning operations and industrial processes where visible emissions can be expected to occur. As these

sources were “manufactured” after July 1, 1971, the visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period except for the following exceptions: Six-minute averaging periods may exceed 20 percent opacity if: (1) no six-minute period exceeds 87 percent opacity; (2) no more than one six-minute period exceeds 20 percent opacity in any hour; and (3) no more than four six-minute periods exceed 20 percent opacity in any 24-hour period. Natural gas-fired boilers typically have no visible emissions. Consistent with current DAQ policy, no monitoring, recordkeeping or reporting is required for visible emissions from the combustion of natural gas in the boiler. Compliance with this rule is expected.

- 15A NCAC 02Q .0317: Avoidance Conditions: The facility has taken avoidance conditions for the following regulations:
 - 15A NCAC 02D .1111, Maximum Achievable Control Technology and the “NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters,” 40 CFR 63 Subpart JJJJJ. More discussion on MACT avoidance is found in Section 6.
 - 15A NCAC 02D .0530, Prevention of Significant Deterioration (PSD), for sulfur dioxide (SO₂) and carbon monoxide (CO). More discussion on PSD avoidance is found in Section 6.
 - 15A NCAC 02Q .0700, Toxic Air Pollutant Procedures. More discussion on avoidance of air toxics is found in Section 7.
- 15A NCAC 02D .0524, Subpart VVV
 - The affected facility to which the provisions of this subpart apply is each coating operation and any onsite coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates.
 - Any affected facility for which the amount of VOC used is less than 95 Mg per 12-month period is subject only to the requirements of §§ 60.744(b), 60.747(b), and 60.747(c). If the amount of VOC used is 95 Mg or greater per 12-month period, the facility is subject to all the requirements of this subpart. Once a facility has become subject to the requirements of this subpart, it will remain subject to those requirements regardless of changes in annual VOC use.

$$\frac{95 \text{ Mg VOCs}}{\text{yr}} \times \frac{1,000,000 \text{ gram VOCs}}{1 \text{ Mg VOCs}} \times \frac{0.0022046 \text{ lbs VOCs}}{1 \text{ gram VOCs}} \times \frac{1 \text{ ton VOCs}}{2000 \text{ lbs}} = \frac{104.72 \text{ tons VOC}}{\text{yr}}$$

- 15A NCAC 02D .1100, Toxic air pollutants
As of July 2, 2007, the Permittee has demonstrated compliance on a facility-wide basis (excluding those sources exempt under 15A NCAC 02Q .0702 “Exemptions”) with all toxic air pollutants (TAPs) covered in 15A NCAC 02D .1104. The TAP emission rates used in the air dispersion modeling are included as emission limits in the table below.

Thread bonding operation (ES-03): ES-03.01 (B1), ES-03.02 (B2), ES-03.06 (B6), ES-03.07 (B7), ES-03.09 (B5), ES-03.11 (B11), ES-03.12 (B12)

Dye house (ES-11)

Multipass bonder (ES-08): ES-08.W12 (B5), ES-08.W13 (B6), ES-08.W15 (B7), ES-08.W16 (B8), ES-08.W17 (B9), ES-08.W19 (SAP1), ES-08.W20 (SAP2), ES-08.W21(SAP4)

This application for a renewal of this facility does not add an emissions increase in toxic air pollutant emissions, therefore no changes will be made to the permit.

Note: Emission sources ES-12 and ES-7 were removed with this renewal which emitted the common pollutants listed in the table below in this section.

Pollutants	Applicable Regulation
Acetic Acid	2.47 lb/hr
Arsenic	3.83 lb/yr
Benzene	19.2 lb/yr
Cadmium	2.87 lb/yr
Flurides	1.1 lb/dy
Formaldehyde	.087 lb/hr
HCl	0.58 lb/hr
HF	0.296 lb/hr
Mercury	0.02 lb/dy

- 15A NCAC 02D .0958, Work Practices for Sources of Volatile Organic Compounds – This rule requires facilities that use VOC-containing materials to use good work practices when handling those materials. However, according to 02D .0902, this rule only applies to areas designated as ozone nonattainment. McDowell County is not such an area, and therefore this rule does not apply to this facility.

6. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

NSPS

(40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units)

This rule (with some exceptions) applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h). Thus, this rule applies to the new boiler (ES-18) with a maximum heat input of 16.74 MMBtu/hr. Under the rule no emission standards apply. As a boiler with a heat input less than 30 MMBtu/hr the only requirements are:

- The Permittee shall record and maintain records of the amounts of each fuel fired during each month. [40 CFR 60.48c(g)(2)] These records shall be maintained by the Permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]
- The Permittee shall submit a notification of the actual date of initial startup of the boiler to the Regional Supervisor, DAQ, postmarked within 15 days after such date. [40 CFR 60.7(a)(1), 60.48c(a)]
- The Permittee shall submit a notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1), 60.48c(a)] This construction notification, however, is being met through the submittal of this permit application. 40 CFR 60.7(g) states:

If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

Compliance with this rule is expected.

NESHAP/MACT

The facility is currently avoiding being classified as HAP-Major by agreeing to a facility wide limit on HAP emissions. Individual HAPs emission from Coats does not exceed 10 tons per year neither the summation of HAPs exceeds 25 tpy. Boiler ES-18 is potentially subject to “40 CFR 63 Subpart JJJJJ- National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.” However, as a gas-fired boiler, the boiler meets the exemption by 63.11195(e). Therefore, this rule does not apply to the new boiler. The permit contains a facility-wide HAP major avoidance condition in Section 2.2 A.2. Continued compliance is expected.

PSD

McDowell County is in attainment for all pollutants.

For major stationary sources located in areas designated as attainment with respect to a specific regulated criteria pollutant, the requirements of the PSD program (40 CFR Part 51.166, as incorporated into 15A NCAC 02D .0530) apply. Major stationary sources are those sources with a potential to emit (as defined at 40 CFR 51.166(b)(4)) of a regulated New Source Review (NSR) pollutant of either: 100 tons per year or more if the source is listed in 51.166(b)(1)(i)(a); or 250 tons per year or more otherwise. The subject facility is not one of the stationary sources listed under 51.166(b)(1)(i)(a) and is therefore in the "250 ton" source category. It is considered a major stationary source under PSD for VOC emissions. This renewal application will not increase or decrease any criteria pollutant emissions; therefore, the status of this facility will remain the same.

McDowell County has not triggered the minor source baseline date for any regulated NSR pollutants. Thus, no increment tracking is required.

112(r)

The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the 112(r) thresholds. No change with respect to 112(r) is anticipated under this permit renewal.

CAM

The CAM rule (40 CFR 64; 15A NCAC 02D .0614) applies to each pollutant specific emissions unit (PSEU) at major TV facilities that meets all three following criteria:

- the unit is subject to any (non-exempt: e.g. pre November 15, 1990, Section 111 or Section 112 standard) emission limitation or standard for the applicable regulated pollutant.
- the unit uses any control device to achieve compliance with any such emission limitation or standard.
- The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source (i.e., 100 tons per year for any pollutant, less than 100 tons for the pollutant in non-attainment area, or 10/25 tons per year for HAPs).

CAM is not applicable to Coats American as any current unit does not use control device to achieve compliance with the applicable emission limitation or standard and does not emit any applicable regulated pollutant more than the major source threshold. The new boiler has potential pre-control device emissions of the applicable regulated pollutant less than major source threshold and does not use a control device to achieve compliance with the applicable emission limitation or standard.

Therefore, the boiler does not meet the applicability criteria specified above. This permit renewal does not change the facility's CAM status.

7. Facility Wide Air Toxics

Coats is subject to 02D .1100 and 02Q .0711. This application is not expected to increase emissions rates for any TAPs, so no additional modeling is required because there are no increases in the emissions of any toxic air pollutants due to this renewal application.

In order to comply with 02Q .0711, Coats must not emit any of the pollutants listed in the permit above their respective TPER. Therefore, no additional modeling or changes to the TPER list are required.

8. Facility Emissions Review

The facility-wide potential emissions do not change under this TV permit renewal. Actual emissions for criteria pollutants and HAPs for the years 2017 through 2012 are provided in the header of this permit review.

9. Compliance Status

DAQ has reviewed the compliance status of Coats American. During the most recent inspection, conducted on April 21, 2022, by Christopher Scott of ARO, the facility appeared to be in compliance with all applicable requirements.

A violation of notice was sent to Coats American due to failure of submission of the annual compliance certification on due time. Coats was asked to respond by April 11, 2019. An official response was received by DAQ on April 2, 2019, stating that the submission failure occurred due to administrative error even though the compliance certificate was reviewed and signed by EPA prior to the deadline.

10. Public Notice/EPA and Affected State(s) Review

A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0525, the EPA will have a concurrent 45-day review period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice provided to the public under 02Q .0521 above. No affected states or local agencies are within 50 miles of this facility.

11. Other Regulatory Considerations

- A P.E. seal is NOT required for this renewal application.
- A zoning consistency determination is NOT required for this renewal application.
- A permit fee is NOT required for this renewal application.

12. Recommendations

The permit renewal application for Coats American, LLC. located in Marion, McDowell County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends the issuance of Air Permit No. 01895T29.